

# D430 Features and Technical Specifications

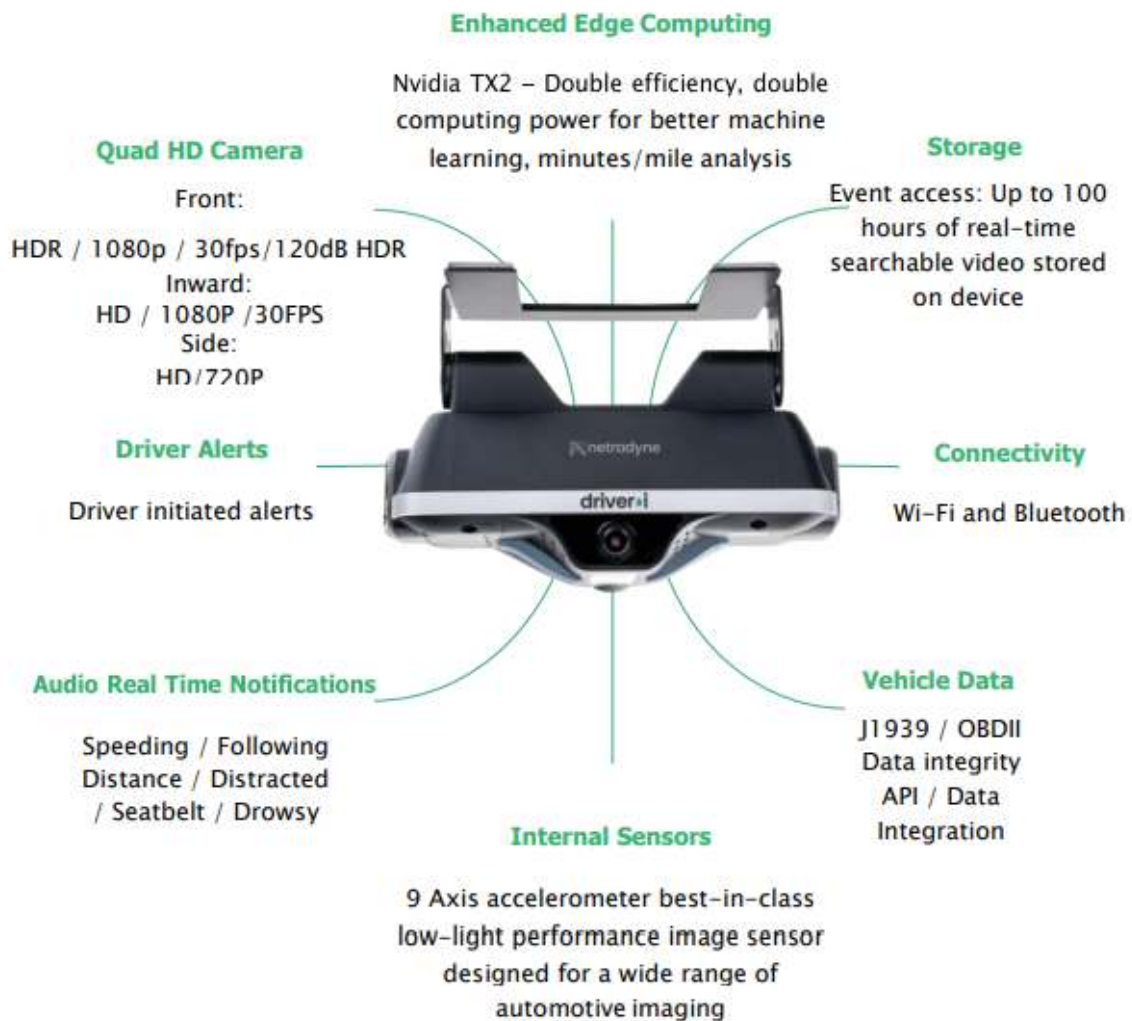
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[help-installation.netradyne.com/hc/en-us/articles/4897322580121-D430-Features-and-Technical-Specifications](https://help-installation.netradyne.com/hc/en-us/articles/4897322580121-D430-Features-and-Technical-Specifications)

Driveri® is an AI powered vision based IoT system, sold as an aftermarket product to fleets. The device is installed in trucks/cars behind the rear-view mirror, and the power is supplied from the car battery through a Power cable. The device is capable to connect with the OBDII/J1939 of the vehicle to collect the engine data. This device is passive to the driver.

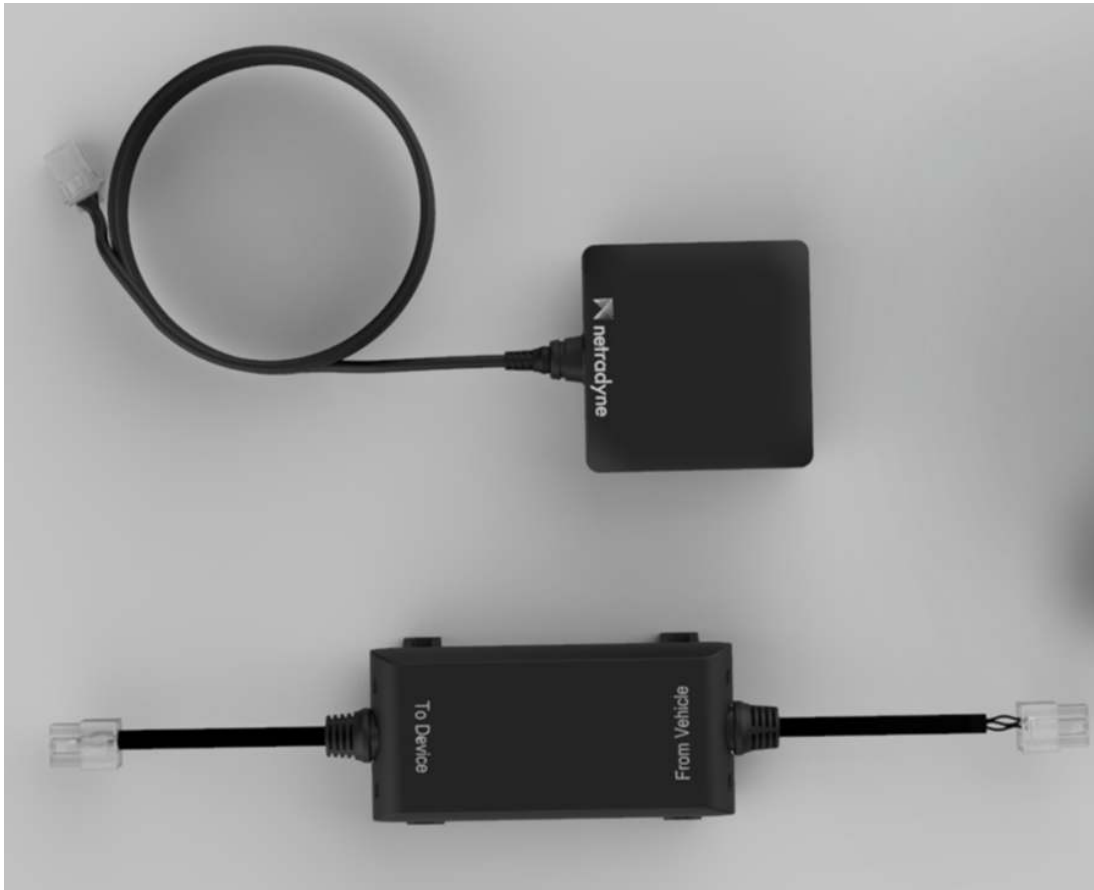
When the truck is running, the device captures 360° videos where the outward facing camera is the primary recording and other 3 cameras are optionally configured as per the customer requirement. The recorded videos are processed (using our patented machine learning algorithms) on the device together with the other sensory data and can detect any events related to driving behavior and driver behavior.

When an event is detected, an alert together with the supporting processed data is uploaded to the cloud dashboard where the events and related data can be accessed by the fleet manager. The device has 2 buttons on the bottom side of the device, when pressed creates alerts which are user generated. 2 LEDs on driver facing side indicate the current operational state of device.



## Features

- Nvidia TX2 Module  
Dual-core Denver 2 64-bit CPU and quad-core ARM A57 complex NVIDIA Pascal™ architecture with 256 NVIDIA CUDA cores - 1.3 TFLOPS(FP16)
- Outward facing camera with 120dB in HDR mode
- Inward /driver facing camera OV2735 with IR LED for night vision
- Connectivity - LTE / WiFi / BT
- 2 LED indicators to represent device state
- Integrated Microphone & Speaker
- 4GB RAM + 128GB eMMC based Storage (Storage expandable up to 256GB)
- Inertial sensor (Accelerometer & Gyro), Thermal sensor



GPS Cellular Module (above); SuperCap Cable (below)

### Processor and GPU Specification

<b>GPU</b>	NVIDIA Pascal™ architecture with 256 NVIDIA CUDA cores
<b>CPU</b>	Dual-core NVIDIA Denver 2 64-bit CPU & Quad-core ARM Cortex A57 MPCore
<b>Video Encoding - H.265</b>	1080p @ 30 fps
<b>Video format</b>	MP4 with H.265
<b>Sensors</b>	IMU – Accelerometer + Gyro, Temperature, Ambient Light

### RAM and Storage

<b>Memory (RAM)</b>	4 GB LPDDR4 @16000MHz
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**Storage** 16 GB eMMC (System) + 128GB eMMC (Video)

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**Expandable Storage** Up to 512GB via eMMC

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### Camera Specifications

Camera	Outward	Inward	Right & Left
<b>Pixel Size</b>	2.8µm OmniBSI-2 pixel	3µm x 3µm	3µm x 3µm
<b>Dynamic Range</b>	>90dB dual capture; >120dB in HDR mode	72db (not true HDR)	72db (not true HDR)
<b>Responsivity</b>	~5 V/lux sec	3.3 V/lux sec	3.3 V/lux sec
<b>Lens Size</b>	1 / 2.7"	1 / 4"	1 / 4"
<b>F No.</b>	1.6	2.0	2.0
<b>Field of View</b>	74° (H) 57° (V) 90° (DI)	148° (H) 80° (V) 168° (D)	127° (H) 82° (V) 143° (D)
<b>Construction</b>	6G – Visible	6G + 1R Filter - Dual Band Pass	2G2P – Visible with IR Filter

### Wireless Connectivity & I/O

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**LTE Connectivity** 4G LTE (Cat 3) – Band 25, 26

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**SIM Connector** No, embedded SIM

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**Wi-Fi** 802.11 ac

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**Bluetooth** v4.0

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## Electrical Specification

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<b>Input Voltage</b>	10V-15V
<b>Input current (full operation)</b>	12V / 3A
<b>Max Power Consumption</b>	30W
<b>Signal Input – High Voltage (Pos)</b>	+17V
<b>Signal Input – Low Voltage (Neg)</b>	+7 V
<b>Operating Temperature</b>	-5o to 55o C

### Active Mode Power Consumption

<b>Peak Current (A)</b>	2.3A @ 12V
<b>RMS Current (A)</b>	1.12A @12V
<b>Peak Power (W)</b>	27.6W
<b>RMS Power (W)</b>	13.5W

### Periodic Wake-up Mode Power Consumption\*\*

<b>Peak Current (A)</b>	1.6A @ 12V
<b>RMS Current (A)</b>	0.78A @ 12V
<b>Peak Power (W)</b>	19.2W
<b>RMS Power (W)</b>	9.4W

### Shutdown Mode Power Consumption

<b>Current (A)</b>	14mA @ 12V
<b>Power (W)</b>	168mV
<b>Average Power consumption***</b>	38.7mAh***

**Note:**

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\* These values are measured at room temperature of +25°C

\*\* Power Consumption (6 min/ every 3 hours after vehicle shutdown)

\*\*\* As per default Periodic wake-up Mode defined in \*\* with ignition off

**Physical Dimensions**

<b>Length x Width x Height</b>	127mm x 96.2mm x 45.4mm / 5 x 3.78 x 1.78 in
<b>Color</b>	Black
<b>Case Material</b>	Polycarbonate (PC)
<b>Power Cable Length</b>	3 meters
<b>Power Cable Thickness</b>	5.3 mm / 0.20in

**Battery Consumption**

3 minutes for every 360 minutes	20.4mA
6 minutes for every 180 minutes	38.7mAhh

**Wireless Connectivity & I/O**

<b>LTE Connectivity</b>	4G LTE (Cat 3)
<b>SIM Connector</b>	No, embedded SIM
<b>Wi-Fi</b>	802.11 b/g/n/ac
<b>Bluetooth</b>	v4.0

### Mechanical Shock

<b>Pulse Type</b>	Half Sinusoidal
<b>Accelerator</b>	50gm
<b>Pulse Duration</b>	6ms
<b>Number of shocks per axis</b>	20 Nos. (10 positive and 10 negative)

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